

## The Sewerage & Water Board OF NEW ORLEANS

625 ST. JOSEPH STREET 504.529.2837 OR 52.WATER

www.swbno.org

June 26, 2020

Dear Mayor Cantrell, Honorable Members of the New Orleans City Council, and Orleans Parish Delegation:

This report is delivered in accordance which Revised Statute 33:4091, Section F, which states: "In addition to the other requirements of this Section, the board shall send a report, by electronic mail, to the members of the Orleans Parish legislative delegation and the members of the governing authority of Orleans Parish detailing the pumping and electrical power of its facilities and the available manpower no later than twenty-four hours prior to a hurricane entering the Gulf of Mexico as determined by the National Weather Service and no later than forty eight hours after a flood watch or warning or thunderstorm watch or warning is issued by the National Weather Service for any area of Orleans Parish."

On June 24, 2020, the National Weather Service issued a thunderstorm warning for parts of the New Orleans area. The following is a preliminary report detailing the manpower, pumping and electrical power of the Sewerage and Water Board's (SWBNO) facilities throughout the event.

While a number of areas experienced heavy rainfall, an intensity of nearly 6 inches per hour in some areas, the storm moved through the New Orleans area quickly which allowed our pumps the needed breaks to keep up with rainfall.

Additionally, we know that every storm behaves differently, so it's important that our operations remain nimble and adaptable to account for the unpredictability of each rain event. We took the lessons learned from the June 10 storm and implemented them on June 24 by warming up our EMDs sooner than we have in the past. This helps ensure that the EMDs can be brought on line to produce power as

additional pumps must be started. We have implemented this into our normal operations. Additionally, this week's storm did not sit over the city for an extended amount of time, giving our pumps much needed time to catch up and drain stormwater.

Overall, as with every storm, there were a number of unplanned events that took place, none of which had a major impact on drainage. For example, we briefly lost Entergy power at DPS 7, stopping one pump. Entergy power was quickly restored and our operators we were able to re-start the affected pump in less than 10 minutes to compensate for the loss. Similarly, we lost Entergy power at DPS 6, stopping two pumps; again, Entergy power was quickly restored and our operators immediately restarted the two pumps and prevented any significant impact to drainage. At the end of the day, our system performed as expected and the breaks in intense rain provided us the needed time to drain the city quickly.

## **PUMPING**

We entered into this week's storm with 98 of our 99 drainage pumps and all 5 electro-motive diesel generators (EMDs) available for use. We proactively took pump D at DPS 3 offline for maintenance. The loss of one drainage pump did not affect our operations during the storm.

## **POWER**

The drainage system requires about 52 MW of power to run the greatest combination of its drainage pumps. At the outset of the event, we had 62.5 MW of 25Hz power available, as set forth in the table below:

Unit	Frequency	<b>Capacity</b> in	Available
		MW	
T1	25 Hz	Approx. 6 MW	6
T3	25 Hz	Approx. 6 MW	6
T4	25 Hz	20 MW	20
T5	25 Hz	20 MW	0
Carrollton Frequency	Converts 60 to	8.5 MW	8.5
Changers 1&2	25Hz		
Station D Frequency Changers	Converts 60 to	12 MW	12
3&4	25Hz		
Five EMDs	25Hz	12.5 MW (total)	10

		2.5 MW (each)	
		Total 25 Hz:	62.5 MW
T6	60 Hz	15 MW	15 (60 Hz)

Turbine 5 (T5) has been unavailable since December, when it was damaged in an explosion. To offset the 20MW 25 Hz reduction in redundancy, we moved our five EMDs from backup to primary power sources. We utilized Turbines 4 and 1, Frequency Changers 1,2,3 and 4, as well as three of the EMDs, to provide 25 Hz power during the June 24 storm. We also used Turbine 6 to supply all 60 Hz power requirements for the Carrollton Water Plant.

## **MANPOWER**

Of New Orleans' 24 drainage pumping stations, some are staffed, some run remotely and some are staffed as circumstances dictate. For this week's event, we maintained a heightened state of vigilance. All regularly manned stations were adequately staffed and additional personnel were on standby, ready to man normally unmanned stations if required.